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ABSTRACT

The educational patterns of individuals who have used library resources in Allegheny County, Pennsylvania for independent learning projects on a continuing basis were studied. The tendency of respondents was to use a combination of all four major types of resources for information and planning: (1) self as resource; (2) non-human resources, such as library materials; (3) another person, such as a librarian; and (4) a group. The findings of this study appeared to have implications for such helping professions as librarianship. The role of the librarian as learning consultant could be developed around the psychology of actual learning patterns rather than developing from the way instructors teach or librarians train laymen in library use. (Author/PF)

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LEARNING PATTERNS OF LIBRARIAN CLIENTS

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1976

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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LEARNING PATTERNS OF LIBRARIAN CLIENTS

Abstract

The number of adult learners in the world independently conducting learning projects is estimated in the millions. The public library in the United States, and elsewhere, is a prime support site for such adults. This first approach studies in depth the selflearning and educational patterns of individuals who have used library resources on a continuing basis among selected respondents (N-128) from the library service outlets of Allegheny County (Metropolitan Pittsburgh).

The elements and patterns of self planned learning employed among these respondents are similar to findings of other survey research in independent learning projects. The content of learning projects emerges from real-life negotiations and ranges across the transactional environment. Motivation, as the behavioral reciprocal of content, is not necessarily limited to inferred hidden persuaders. Episodic behavior varies in length of time around function: consulting people; browsing, searching; viewing, listening, reading. But, induced by motivations similar to those found in other surveys, episodes are linked together to form sequential learning projects exceeding the minimum definition of seven hours spread over three days.

The tendency of respondents was to use a combination of all four major types of resources for information and planning: self as resource; nonhuman resource (e.g. library materials); another person (e.g. a librarian); or a group. The findings of this study appear to have implications for such helping professions as librarianship. The role of librarian as learning consultant could be developed around the psychology of actual learning patterns rather than stem from the way instructors teach or librarians train laymen in library use.

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ONE

CITIZENS AS LEARNERS

The planning of sequential learning appears to be a complex and delicate set of tasks for many individuals. Several of the arrangements which have to be done and the decisions to be made are difficult because the learner is operating in an area that is new. In few, if any instances does the learner sit down at the beginning of a learning project and plan a detailed strategy for the entire enterprise.

Sometimes a person will approach another individual such as a friend, acquaintance or possibly a family member looking for help even when s/he does not specifically know what really is needed or even wanted. The intention may be to find out what kind of help, if any, this source could provide. Or, it may be that the learner needs someone to talk out some ideas in verbal form and hear what they sound like.

Help with planning (and with subject matter) comes from many resources, not just from one or two individuals or objects and other non-human resources. A certain chronological sequence of events seems to be fairly common in the process of seeking help, and Figure 1 is as close to a "flow-chart" as it is possible to come. The following elements appear to be developmental steps in the behavioral cycle of the help-seeking process, especially when the learner completes the project and achieves personal satisfaction:

Develops a general awareness of the need for help out of some transactional situation.

Becomes fairly specific about just what is needed as a result of articulating the associated feelings.

Selects particular resources partly through serendipity and partly after seeking advice.

Decides how to approach individual resources as well as how to obtain specific information and planning assistance.

Takes some action which tends to place a hold on the future and produce satisfying personal results.

To a perfectionist, it may seem that people "ought" to be able to plan better than they do in undertaking a learning project. This may have been the case in the classical world of objective knowledge where subject categories can be arranged with balanced symmetry. But in the real world of the late 20th century, the planning which does occur despite the odds against it seems to be a noteworthy achievement and a credit to the remarkable potention of the human individual. In any event, the following elements observed in the considerable survey research already completed are listed in summary format:

Most people undertake at least one or two self-planned learning projects a year in order to satisfy a personal interest, have something informative to communicate to others, or meet some action oriented imperative (solve a problem).

A great deal of random activity is generated in, and by the individual person as s/he responds to, and attempts to overcome socioenvironmental imperatives.

Motivations as behavioral competencies engender satisfaction and enhance the individual's self-worth in spite of what otherwise appears to be an increasingly complex and overwhelming sociocultural environment.

Patrons who use libraries learn in the same way as do the other self-learners in the population who do not use libraries -- in individually developmental steps at variance with organized knowledge.

Learning resources include everything in the environment which either can stimulate and focus individual awareness or provide informative data for planning and develoing a project.

The environmental set of the person in a self-planned learning project is so strong that individuals have difficulty exploiting a subject oriented resource environment with facility and ease.

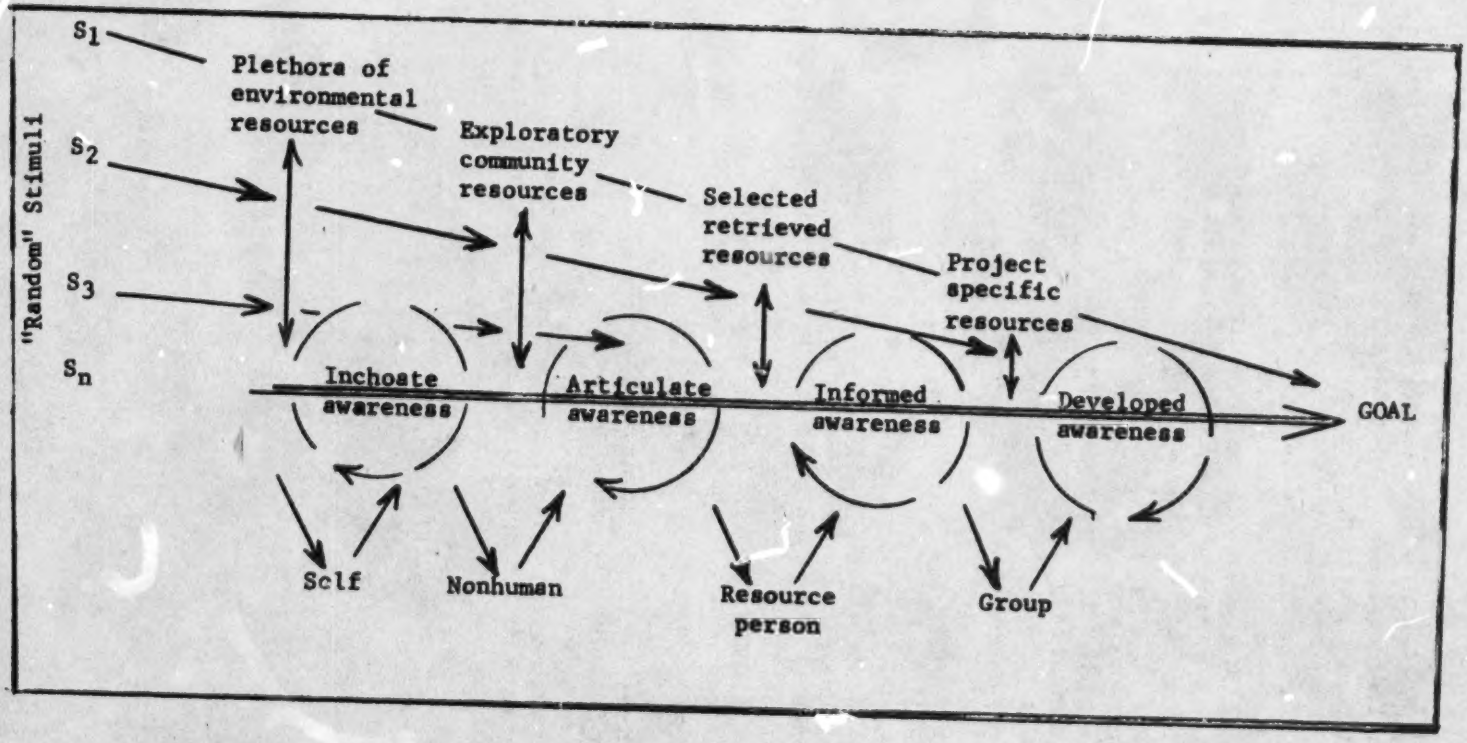

Figure 1. Project Awareness and Selfcontrol

The data on behavior have been collected from what people say they do in a self-learning mode. The patterns in this behavior have been identified in the findings of several research studies. This present study has reconfirmed the fact that self-learners do not necessarily develop their independent learning projects along the lines of the abstract subject categories of library collections. Instead, there is presumed to be a closer relationship between an orientation to learning interests and the totality of real life concerns within which any one individual is immersed.

Even those persons who use libraries do not plan to meet their needs on the basis of how librarians analyze content, nor index and store it for retrieval, such as the model of employing classification as a method of thinking. Instead the actual learning habits and patterns of respondents have to be studied in the manner in which they naturally process information in episodes and then eventually link these episodes into sequential learning projects.

The function and interrelation of episodes have been considered to be evidence of significant behavior in previous surveys of independent learning projects. Data of this nature were collected in this study in order to determine whether the learning patterns of respondents who use libraries are different from independent learners in the general population. In terms of the number of projects and the time spent on the one topic being surveyed, the findings of this study are comparable to previous surveys with only one exception.

Previous researchers have reported a single distribution in duration of episodic behavior with mode and mean points. However in this study, the respondent reported that "it depends." Apparently, an information processing episode is shorter than a study episode in a learning project. In any event, episodic behavior varies by function and context:

Consulting people	10-25 minutes
Browsing, searching	20-45 minutes
Reading, viewing, listening	30-120 minutes and often more

This report finds that the independent learning projects of library patrons do not differ to any great extent from self-learning projects conducted under other auspices, and that the librarian/information specialists' clients do not differ from other self-learners who do not use library and information centers. As a result, it is hoped that a basis can be established for a psychology of interpersonal and developmental information processing over time as distinct from the developmental tasks/values approach upon which so much of the traditional service patterns of the librarian/information specialist are based.

In various studies of the independent learner, the role of the resource helper such as the librarian/information specialist has been investigated only obliquely as it is perceived by the respondent. Primary attention is given to the patterns in which respondents employ a variety of resources both human and nonhuman in developing self-learning projects. It should also be noted that studies of self-planned learning are not limited to the library user survey in the traditional sense where the distribution of subject interests in a population serves as a guide in eventually deploying the infrastructure resources of a network system.

TWO

STIMULUS CONDITIONS

The behavior of a person within his world can be seen as a specific transaction with particular and concrete phenomena in a real situation whether sociocultural or environmental. The imperatives of daily life are processes and procedures which place the independent learner as well as every person under constant pressure to adapt and master environmental and cultural situations relevant to survival and progress in living.

The environment whether a natural or created endeavor is taken to be the context of learning in real life. The environment is the area within which communicative behavior occurs between two or more human entities. These enactments are the every day interpersonal dramas which constantly occur among individuals, groups or organizations. The dramatic interface is negotiative in nature as the actor-participants try to do business with the situations within which they are involved such as:

> Self-transactions consist of looking at or developing one's self in any aspect. The "natural laws" of self behavior include motivation, feeling and valuing processes and ways of subjecting one's own ideas and decisions to deliberate analysis and evaluation.
>
> Interpersonal transactions consist of interacting with other persons who are also governed by the same kinds of laws that govern the self, but from their own centers of concern and interest. By empathy-thinking we identify their concerns and interests and learn how those concerns affect their behaviors in various situations.

Institutional transactions with the social structures of public opinion, beliefs, customs, language, laws, organizations which are governed by the interplay of the human ideas and feelings of those who make them up. In turn they have effects on the ideas and feelings of people and are internalized as the basic "laws" of behavior.

Physical and nonverbal transactions aimed at using or adjusting to natural and biological laws, in which the phenomena are raw materials, animals, plants, machines, physical goods.

Message transactions in which the individual negotiates with written, recorded and stored materials of knowledge as well as with the verbal or ephemeral resources more widely dispersed throughout the community. The competencies required here include not only retrieval skill in index space, but also the ability to evaluate the congruence of a subject with its referent.

From the context of the individual, the patron apprehends these transactional areas through perception. Under some stimulus set, the perception may at first be vague and uniquely informal. Initially, the stimuli are undifferentiated and may produce a vague uneasiness or interest. But the fact of the matter remains: the individual not only responds to stimuli but also uses them as resources for increasing his competence in controlling both the self and the environment. The psychological term "stimulus" is almost equivalent to the "surprise" value of data as considered in information theory.

What may be of little interest to one person may be highly pertinent to another. In a similar vein, a stimulus to one person may of necessity have to be concrete; to another it may have to be more intellectual and abstract. As the individual person articulates the situational context of need or intent, the stimuli become increasingly differentiated into opportunities and constraints. The thrust or vector in a cycle of behavior is towards cognitive control regardless of how emotionally disturbed the individual may have been under the initial stimulus set.

The range of socio-cultural and environmental conditions which can serve as stimuli to human entities may indeed be limitless. The respondents in the survey research which has been done appear to be no different from other human beings. The following statements may be taken as examples which are common to the human experience:

Television programs such as the English and American historical series influence a person's attitudes.

Specialty radio programs such as those of the western and classical stations in Pittsburgh even though they may be tuned in out of habit.

Part-time volunteering such as contributions to Junior Achievement raise imperatives for the volunteers.

News events in the daily papers and on television or radio talk shows influence the person's desire for more information.

Passtime reading and browsing in bookstores and libraries cause people to pay attention even though an intent to learn has not yet developed.

Personal record collection acquisitions lead to the reading of biographies and further information about composers and performers.

Subscriptions to one or more special-audience magazines may lead to further activities.

Friendly conversations may precipitate follow-up behavior even though the original desire may have been for relaxation.

Health problems, or a death in the family can lead to continuing preventative measures.

Outdoor life may lead to a subtle and pervasive interest in the quality of environmental conditions.

Once stimulated, episodic behavior is an observable way of describing the response of people to stimuli which cause them to pay attention. An episode is a definable period of time held together by similarity of intent, by the activity itself or the sequence of ideas and actions which occur in it. Each episode can be remembered as having a beginning and end, and range in length of time from 15 or 20 minutes to two hours or more. Any given human being might get involved in any number of such episodic occurrences as the following every day:

Conversations, reading, television, radio, movies, drama, and travel influence the person's information and attitudes even though they may be motivated by immediate pleasure, habit, sociability, or a desire for relaxation and entertainment.

Observing the world around them help people learn even when the intent to learn is not as strong as other motivations such as curiosity or desire for immediate enjoyment of art, sports events, or other common events in the everyday environment.

Home repair, running a meeting or supervising children may be the primary motivation for certain activities and have some by-product of acquired knowledge and skill.

Marriage partner, joining a group, or participating in a neighborhood project may produce some changes in participants. Unintended occurrences such as embarrassing moments or traffic accident may influence behavior.

Environmental influences can be pervasive, including the people with whom one interacts, the appearance and resources of city or town, the political climate, the expectations and norms of society and employer.

Whether any of these episodic initiators will ever lead into learning projects is quite another question. In real life, the individual mulls them over in mind. They may lie dormant for weeks while the strength of their interest dissipates if the stimulus is not reinforced. A person is not likely to be changed by one occurrence or by the reading of one book. If, however, the individual has been under siege as it were from several stimuli, s/he may be induced or motivated to become involved with episodic information processing in the following behavioral steps:

Naming and describing an area not only separates it from other areas but allows the individual to concentrate, screen out interference and in general "get a handle" on things.

Analyzing the referent situation into constraints and opportunities helps the learner to get going without coming up immediately with a full-blown statement of the topic, or problems of interest.

Free associations, not inhibited by outside expectations allows the individual to "play around" with any variety of if-then "taxonomies" about the nature, effects and conclusions implied by her/his concern.

Overt questions, tasks or "shopping" lists of things to do indicate that the learner is ready to "go public" about her/his project and talk with other people about it.

Blueprint emerges from "going public" including articulations about wants (goals) and activities which in practice remain undifferentiated.

Satisfaction occurs when the learner tries something out and finds that feedback is favorable where feedback is largely nonverbal, supported perhaps by a brief word of appreciation, or where feedback is just a feeling of "that's enough."

Improved communication skills can help the client not only to articulate more effectively but also to perceive that articulation is essential to the learning process. Greater learning and thus more satisfaction can occur when the client is led to examine his own experience. The ability to articulate, whether orally or in outline format, requires the organization of various parts into more coherent wholes which help accomplish some purpose. Articulation helps to facilitate learning by engendering information processing in the individual at the neurological, sensory, perceptual, and conceptual levels.

THREE

EPISODE LINKING MOTIVATIONS

Human behavior may be random, but it is more often organized into an episode when confronted with the surprise value of information. No person is exempt from the cycle of adaptive behavior when confronted with a concern or interest. Learning may of course occur in episodic behavior; but at other times, the client may want to be encouraged to achieve deeper satisfaction in these efforts in sequential learning projects. In those instances, episodes are linked together in sequence to achieve a more underlying purpose or to satisfy a more pervasive interest. Such a linkage may not occur immediately but develop over a period of time.

The linking together of episodes into patterns of related activities requires both motivation and planning. The individual may or may not always be deliberately aware of these components. The cut-off point in practice may be difficult to establish but there is a point beyond which the individual does not presently have the motivation to go. A particular interest may be lost in the welter of other episodes which demand immediate attention. The individual may return and pick up the interest again, or s/he may be motivated to do so in some encounter with a friend, an acquaintance or perhaps a sensitive and perceptive helping professional.

The findings of survey research and the literature of independent learning give considerable attention to the motivations or reasons why an individual may want to link motivations together. Instead of focusing on a feeling of tension or incompleteness in one episode, the individual may become interested in several related episodes usually spread over a period of time. If reasons can be specified for undertaking a project, then these are related to the articulated reasons for ceasing work on it. When a person does not have a clear picture of what s/he wants to learn or a definite goal to guide some desired behavior change, it is motivations like the following which help to carry the person beyond uncertainty:

The "cause," including women's rights and interests, as well as black culture and history lead to action-oriented learning projects. It is interesting to note that in these instances a wide range of resources were sought.

Personal satisfaction including the development of self-confidence, better interpersonal relations and skills grew out of such stimulus conditions as leafing through "Psychology Today."

Being well informed enough to share information with other people may be a more socially approved sublimation of the urge to gossip but in one instance at least a husband was helped to communicate better with his wife.

The desire to see the end results or use the finished product featured as a strong episode linking motivation to some respondents.

Satisfaction in reading when everyone else is asleep and because a book is started there is an urge to want to finish it.

Impending travel outside the country, close relations working overseas, or traveling on a reduced budget was related to a desire for knowledge.

Inflation and the cost of living lead some people to a concerted attempt to be more self-sufficient through gardening or better nutrition on a reduced budget.

Boredom may be intense enough to promote a search for the creative use of leisure time.

Self-esteem of the person with self-learner status may offset the frustration an individual feels with the confusing deviations of group processes.

Reading activity may be an end in itself particularly with those who still resist mass media communication.

It ought to be clear from the above examples that there is little if any relation between these episode linking motivations and the so called psychic probings which arouse so much aversion in the minds

of some professional resource specialists. It is hard to imagine that a conversation about any of the above motivations could be offensive to anyone. No one in their right senses could directly criticise the articulation of the unexamined assumptions underlying these client motivators because of the fear that such a "frontal" approach would be a "scary" experience to the average citizen.

Human beings behave in real ways that cannot always be theoretically defined. A case in point may be taken from the various speculations about the motivations which drive behavior. If one took the literature at face value, it would seem that the motivators are discrete drives which if triggered will have direct results. Observable behavior on the other hand, suggests that while motivation may be obvious, the resulting behavior may be extremely complex. Such a statement seems a paradox, but unless a person is aware of and can discuss motivation, the potential for learning may remain latent.

At the least, the approach to articulated motivations may help to offset the almost universal tendency to stereotype and pre judge people: this person is goal oriented; that person is activity oriented; another one is content oriented. How can any real human being avoid having all of these orientations? Surely any learner has a goal, an activity and a content, albeit perhaps not all at the same moment of time. It is obviously just as useful for healthy people as it may be for others to articulate motives and to define goals as they seek to satisfy their information needs.

An orientation to the observable behavior of wholly functioning human entities would seem to include a variety of activities in dynamic combinations which may be deduced from the processes involved. Process does have one advantage in that its observable characteristics can be discussed and changed if necessary to meet the circumstances. Consequently, the following characteristics of motivation in process appear to be closer to the transactional nature of real life than to any particular "psychological" types of individuals:

> Concern and Interest Satisfaction: A person may look forward to learning episodes because they satisfy curiosity about something, or discover answers to particular questions. Indecision, ambiguity, and doubt or unhappiness may be reduced. Self-esteem or even impressing others may also result.

Content Enjoyment and Satisfaction Learning content provides pleasure by answering curiosity and thus in the process finding it interesting, fascinating and stimulating. Practically anything can be enjoyable to one of the communicator functions which present numerous stimuli and data and which serve as effective motivators.

Skill Enjoyment and Satisfaction: This may come from practice rather than from learning content. The learner may be trying to improve golf, singing in a local opera, acting in neighborhood plays, building a hot-line center, or participating effectively in a group. The "reasons" for such enjoyment may be for fun, to feel great, or the challenge of something new and different.

Process Enjoyment and Satisfaction may offer a considerable number of enjoyable and mentally stimulating experiences. A "significant other" such as a friend or intimate may be impressed by the learning activities.

Learning Completion or the desire to finish apparently urge some people, for example, to complete the reading of a book. Indeed, Some people feel the need to complete any sort of task or project they have started. In the past librarians have built circulation figures around such an urge.

Extraneous Satisfactions are benefits that could just as easily be obtained through other activities. These benefits are not closely related to the activity of learning or to the particular knowledge and skill. Some people find in the learning environment a meaning which has no necessary connection at all with the stated purpose of the activity.

Such motivators are not some set of hidden persuaders over which the communications elite exert some esoteric and malevolent force. Any or all of them can be initiated in a real human being as a result of some quite common and ubiquitous initiators. In other words, a learning project may be considered as a recurrent process of synthesizing surpriseful data whose output is behavior in order to have a sustained effect on the environment. This effect, as yet in the form of prediction and at first wish-fulfilling or even stochastic, may eventually become a product. But it is before all else an integration -- a synthesis of what has been seen (perceived and processed) before becoming something new and fairly complete as output.

Cycles of behavior are dynamic within episodes (natural spans of attention) and among episodes while these are being combined into self-developed learning projects. Thus, a person who undertakes learning engages in developing a sequential relationship with the environment in at least three developmental modes:

1. What is taking place? One can tell that a client has selected an area of interest when s/he names it. Selecting, differentiating and patterning constitute the data gathering and examination mode.

Initially, the person engaged in processing information is clarifying a picture of some aspect of his world. This person intuitively asks: "What am I selecting as an area of interest? What questions do I have? What patterns do I see?" By answering these kind of questions, s/he gathers basic data, and begins to fill in the gaps in personal knowledge.

This first step is a linguistically intransitive approach to the nature of an area of concern. It may provide a description of a subject or its relation to another employing definitions, examples or comparisons. On another level it is comparable to the historical and descriptive studies which examine what has been or what currently is, such as case studies and survey research.

2. Why is it taking place? Comprehension develops when explanations are sought. In analyzing something, the client looks for cause-effect; the relation of data to assumptions about values, roles, themes, principles; and an evaluative frame of reference.

The human organism, secondly, adds meaning to what it sees by looking at the causes and effects, and by relating explicit data to less obvious facts and concepts. The individual asks, "Why did these things come about? How can I use these perceptions? What other ideas change the meaning of my initial observations?" The individual increases personal understanding by interrelating things. This person connects perceptions with personal values and experiences.

The orientation here is a transitive approach to the cause-effect relationship existing between a subject and its object. By means of analysis (or analytical/interpretative studies on another level) the person endeavors to identify the effect of environment on constraints and opportunities in some problem situation.

3. What would happen if...? Integration and output occur when principles are applied by testing and demonstration. A whole new set of skills or a creative new work may emerge as output from the learning project.

Thirdly, the human organism creates a new picture. By combining static patterns and dynamic relationships a new "structure" is built -- a new arrangement of facts and ideas. Hopefully, this new sythesis informs the person about what to do in the future; what could be done that was not obvious beforehand; how knowledge can be supplied in order to increase the effectiveness of some output response to the world. Thus such an individual asks: "What are my conclusions? What can I predict? What can I create?"

This linguistically subjunctive approach requires a synthesis of basic data and the assumptions about cause and effect in order to predict outcomes. Integrations of new knowledge and interpretations are formulated to influence change processes. Experimental research which systematically tests hypotheses is characteristic of this thinking mode on a more formal level.

These three steps may be taken to constitute a model of the way information is processed linguistically and thus behaviorally. As a second order model it is closely related to, and derived from the patterns in which any informative stimulus is processed by the human adaptive control organism. Based upon such carefully formulated derivations from the "absolute syntax" of thinking, the information processing professions of media, library and information science have not only built classification schemes but have also developed services around the general learning modalities:

- Consultation wherein individuals are motivated toward self help by articulating and describing a context, analyzing and organizing situational components, as well as synthesizing and predicting results.

- Retrieval access in short term mode whereby information is discovered in a group of related materials even though supportive data does not come from any single source.

Continuing experiences which devolve around the traditional educational responses of reading, viewing and listening as well as newer modes of real life involvement.

Mass communication as the articulation of community concerns and as the orchestration of the collective response to problems embedded in human entities.

Motivation research has had a checkered existence and it is impossible to follow up all of its ramifications. For the purposes of real life learning projects, motivation is considered to comprise observable patterns of response to environmental stimuli. These patterns are obviously overt to the individual and to those with whom s/he is involved. For practical purposes, the emphasis desirably shifts away from such covert motivators as the so called "hidden persuaders."

If people spend time learning, they usually do so because of some "environmental" influence:
Some people like being involved, i.e. the process itself is enjoyable.
Some people like to get results, i.e. they want to achieve a goal(s).
Some people like to acquire knowledge, i.e. they just want to know more about the subject.
If people terminate a learning project, they usually do so for one or all of three reasons:
They are satisfied (satiated) with the amount of knowledge or skills learned.
Their enthusiasm for the project has begun to wane or has evaporated.
Their new knowledge or skill has impressed or benefited all those they wanted to influence with it.

Table 1. Behaviors and Motivations

FOUR

PLANNING AND EXECUTING

Learning in real life is closely related to the environment out of which it grows in an organic and developmental manner. Humans learn to respond effectively to other people, objects and events around them by using selective perception and differentiation, forming patterns or concepts and seeing relationships, as well as organizing information into outcome competencies or products. In other words, the individual articulates perceptions, analyzes situations for opportunities and constraints, and maximizes desirable relationships with retrieved data in order to produce some outcome which enhances self-esteem or impacts favorably on the environment.

Several factors can be identified which facilitate independent learning, including engagement (arousal of interest), competence to deal with new information, the use of ideas to organize that information and to apply it to some concrete real life situation. In the process, new competencies are built by observing and receiving "instruction" from environmental imperatives; by making trial performances before adjusting to feedback; and by growing more flexible and independent. The patron reduces "random" activity and discovers the information and competence to plan an entire learning sequence. The choice of a particular resource seems to be based to a considerable extent on emotional or nonrational considerations, at least initially.

The planning and developing of sequential learning episodes can be a complex and difficult set of tasks. For in a new field, how can the individual know what resources are most useful? How can s/he predict the emotional blocks, the required skills and other problems that may arise later in the project? Only rarely will a self-learner sit down at the beginning of a project and in a single episode deliberately plan a detailed strategy for the entire effort. It is much more likely, as shown by survey research that the individual will get involved with a number of negotiations whose place in the proposed sequence may be initially only dimly perceived.

With ears cocked to a deeply felt motivation, the individual begins to articulate that need while keeping the environment under surveillance for possible leads. These leads become the sources from which planning help and information are sought in what only retrospectively can be seen as a sequential process. Thus, learning projects are essentially transactional in nature throughout a process which combines persuasion and problem solving.

On the basis of findings from survey research, it is possible to group the resources for planning and execution into four categories as well as a combination represented by the library as a latent learning system. However useful this grouping may be for the purpose of analysis, it should be remembered that in real life, continuing learners may be negotiating with one or all of these types one after another if not in some instances almost concurrently. In any event, these major transactional areas appear to constitute the whole cohort of resources to a patron involved in real life contexts.

(1) Self-Learners: In many instances, learners retain the major responsibility for day-to-day planning and decision making. A learner tries to detect specific errors in current knowledge, or specific weaknesses in current skill or style. This person studies her own particular needs and decides on the criteria to be used in selecting a particular resource. Such an individual also gathers information on the advantages, weaknesses, accessibility, level and suitability of certain resources or activities. The following statements are characteristic of independent self-planning:

> Grabs books off the shelves of a bookstore or library and selects by publishing date, table of contents, index and in a rapid reading those titles which seem literate and substantive.
>
> Rapid reads contents and uses footnotes for related references until the information begins to repeat itself.
>
> Browses in newstands and then follows up at the card catalog in the library, then browses at shelves selecting on the basis of "maturity" and recency.
>
> Keep my eyes and ears open while involved with television, newspaper articles or conversations; one book leads to another as I browse on the library shelves and take notes.
>
> Recent pamphlets or magazine articles more up to date than books are coupled with sources among my friends who are more creative than library help.

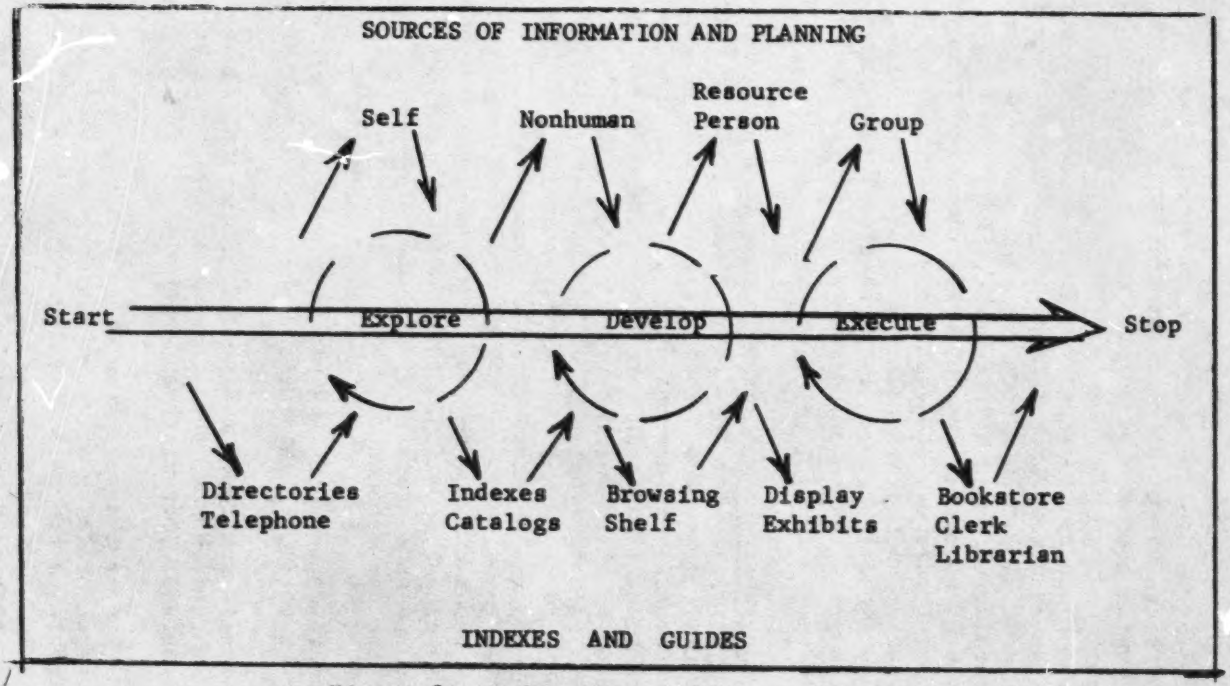

Figure 2. Independent Selfplanned Learning

(2) Non-Human Resources: On some occasions, much of the detailed direction regarding what to learn or do in each episode comes from some object or nonhuman resource. Recording, a series of television programs, a set of programmed instruction materials, a workbook or other printed materials can provide a blueprint for change. At other times, the learner may find a set of directions in one kit that will lead to other closely related episodes such as the following examples:

> Unless one reads just for the sake of it, then not many books perhaps, 4 or 5, were used and supplemented by other sources.
>
> Programmed text on how to run a meeting was bought with outlines for reading and discussion which suggested other books that my wife borrowed from the library.
>
> Being retired I visit museums and bookstores and either pick up leaflets or write to many places for information.
>
> Kit on how to install a fireplace was purchased and I wrote to the manufacturer for more information about heating conservation.
>
> Nature walks help me to observe the environment and give me example of abuses to follow up on with readings and audiovisual materials.
>
> Television program "Washington in Review" is a regular source of information and a guide to what to look for in magazines.
>
> Bookstore is preferable to the library because it is easier to find recent material and when bought I can write in them or tear them apart and do not have to take them back.
>
> Specialized magazines on Melville and Shakespeare give me all the information I need for our discussion group.

(3) Human Resources: The planning or deciding on details may come from another person who helps the learner in a one-to-one situation as a human resource who can provide guidance and advice. There is a need for this kind of helper to fill the gap between the individual's level of competence and the skills necessary to access appropriate resources. Learners may know the sort of person they need or the kind of knowledge such a person will have, but they are not often able to think of some particular individual who has the competence to help. They are clear about their needs, but cannot think of an acquaintance who will fit those requirements. As a result of trial and error, certain persons are discovered who seem to be able to supply the help that is needed.

Friend gave me a book which started me off before going to books and magazine articles; other friends helped me get information on nutrition and food.

IRS toll-free phone got me started and friends who knew of my interest recommended documents and articles.

Practical work of camping showed me what I had to know; my friends helped as well as magazine articles and books.

Opthamologist who tested my eyes suggested some readings to overcome embarrassment at wearing bifocals and then I tested it out among my friends.

Curator was a helpful resource when I talked to him during and after a visit to the museum.

Community resource people helped me to lay out and develop the topic before researching my ideas to see if they match knowledge.

County agent tested a soil sample and on the basis of results gave me several pamphlets to read.

People piggy-backing from one to another after I find one or two people in the phone yellow pages.

Specialists located in Who's Who in Science that I write or phone or on occasion visit them.

Neighbor next door is a gardening freak and put me onto newspaper articles, television programs and even books.

(4) Group Resources: Sometimes learners attend a group or conference. In this instance, the group (or its leader) may decide many of the activities and some varying amounts of subject matter from one session to the next. It should be noted that classroom courses for academic credit are eliminated from the scope of this type of survey research. The groups being considered here are less formal which means they are more of a resource,which suggests and guides,rather than holding the participant to a detailed syllabus. Informal group meetings can help the learner estimate the current level of personal knowledge or the progress being made in acquiring some skill as indicated by the following types of response:

Investment club requires group planning even though there is still a lot of individual follow through.

Animal care and welfare group plans out an outline program for the year which the program secretary follows.

Toastmasters makes it necessary for me to survey a lot of information to use while I am learning to speak on my feet.

Drama club responsibilities require me to dig up a lot of things and use them in producing a play.

Professional association meetings occur on a monthly basis, and the concerns are spelled out in related meeting agendas.

Course at the Recreation Department helped me to learn to play and develop tennis playing as well as in selecting the proper equipment.

The help-seeking process is not always rational and straightforward in a logically programmed manner. Sometimes the learner takes a certain step without thinking it through. Often a learner receives unexpected help from some resource. He may seek one kind of help and obtain several others in addition. Sometimes he does not even seek the resource in the first place; he may happen to notice a book in the browsing collection, or may bump into some relevant person. As soon as he sees the resource and particularly when he becomes familiar with it, he may realize that it can help.

5. Service Patterns as Learning System: One of the purposes of this study was to determine whether people using library resources, learned in the same way as do others identified by previous survey research. It has been found that independent learners who use libraries do their self-planned learning in similarly pronounced patterns as do other independent learners. So strong are these learning elements and patterns that they carry over in the patron's expectations for library use, Indeed, there appears to be a curious mixture of attraction to the library as well as a dissatisfaction with its resources.

The resources of the library as a learning center are apparently only partially being exploited. Independent self planners do not rely totally on any one resource such as lectures or a programmed text. Rather they use a variety of sources. While several may have described the library as being helpful, no one gave the impression that the library actually led them into new heights of

learning -- perhaps through browsing, certainly not through the helping role of the librarian. The following statements may be more suggestive of what the librarian could do than what is actually being done:

Card catalog helps me locate information by and about author's books; then I look up news and reviews and sometimes buy books without worrying about return.

Branch books were all read easily and then I had to go downtown to the business branch for more.

Librarian is questioned about the indexes and good books on the topic; catalog is a last resource.

Card catalog gives a set of similar numbers for me to use in browsing every lunch hour; then the table of contents and the index help me decide what to read.

Browsing in the cookbook section gives me some good ideas which I follow-up in natural food catalogs and magazine indexes to make my ideas more specific.

Depend on the librarian's recommendations for about a dozen books; then I used some government documents, newspaper clippings and the picture file.

Librarian took two books from the closed shelf which thrilled me; never used catalog, but librarian ordered some books from central.

Not conscious of planning, but I walked into the library and followed my nose to get an overview through the browsing areas, periodical indexes and the encyclopedia for background.

Librarian taught me how to use the reference sources and the bibliographies which lead to other sources.

Never use the card catalog; the librarian always gets the material for me even though you have to bring the books back before I completed the hobby project.

Use the children's section for a quick general knowledge about a new subject; then I browse on the shelves and eventually ask a librarian.

Card catalog is of no use; only the librarian can point out the real areas such as the reference books for quick answers.

> Spend every Saturday morning; my ideas lie dormant until I go browsing at the library to activate them.
>
> Library is right across the street from my home where I get into discussions with other regular users and follow up by reviewing the shelves and the new magazines.

Librarians are apparently perceived, based on reported use patterns, as being helpful when one needs to unlock the "secrets" of indexes, card catalog or shelf location. None of the persons interviewed reported ever using or even thinking of having librarians help them think out (i.e. describe, analyze and diagnose) their need for information. Perhaps librarians can give this kind of help; patrons at least do not perceive them as having this capacity.

Those who use libraries extensively may not surprisingly turn out to be the methodical plodders. Several respondents indicated that the library could be used as a place for serious research, but not as an idea center or environmental stimulus for the creative planning of learning projects. All respondents had used the library although perhaps not as often as the recruiting libraries may have thought. Their expectations for it were very low -- to find an interested librarian who seems to care would to many be the height of service expected. In most cases the library was only one source in a continuum of sources used; and in several others the library was of no help or very little help for a particular learning project.

Since those interviewed were selected because they are library patrons, it might well cause one to wonder what the expectations of the man-on-the-street would be of library service. The pattern of how the library was used seemed to be that whenever possible, the respondents preferred to find their own material. Whether this was because of a need to be independent or because of the formidable nature of the librarian was not easily ascertained. As one interviewer noted: "People are extraordinarily patient with the library, delighted when it does produce something; not surprised at all when it doesn't."

FIVE

PROFESSIONAL RECOMMENDATIONS

Since the respondents in this report were all library users, it may be that their self-independence was in part a product of that library use. The library has traditionally been whatever the patron wants to make of it, if indeed that individual bothers to use it at all. The respondents in this study did not consider themselves limited to any one particular source. In other words, they saw themselves as self-learners employing whatever resources and methods seemed to be necessary in the dynamics of a developing learning project. However, in the face of all of the decisions required, one may well wonder why any individual continues to pursue recurrent self education.

In some instances, respondents initially seemed to be little better in ability than children and youth in identifying and in following up on a topic in a directly planned and organized manner. In other words, there was a considerable period of what seemed like random motion until they had "made up their minds." Making up one's mind apparently is in deciding how a felt need is relevant enough to spend time on it. Instead of being random, it is a process of successive approximations by means of which the individual becomes more formally aware of what s/he is doing.

Systems Level Professional Response: The imperative for developing a learning project grows out of the transactional nature of the situation and the fact that satisfaction is but a transitional state for any adaptive control organism. The individual is "compelled" to activity both by his needs and his interests: he is motivated to participate and to continue by his nature as a psychological organism. On the basis of the findings of survey research listed on various pages of this report, it is possible to sketch in only a few recommendations which may be considered by professional media, library and information science:

Place staff inservice training in a framework of continuing education aimed at developing librarians who are themselves at least as "expert" in self-planned learning as the patrons they serve.

Promote a behavioral approach to (adult) learning by including an interviewing practicum in staff inservice training programs.

Re-examine the traditional methods of "training laymen in library use," or conforming patrons to classified knowledge, in relation to a learning "psychology" of independent study.

Develop and focus public relations on the librarian as a learning consultant in order to realize more effectively the profession's traditional philosphy of service to individuals.

Identify all community resources for information and learning, and organize access to them around behavioral principles such that the transition to subject classified resource does not appear so formidable to the average person.

Revamp library architecture so as to ease and thus enrich the entry transition from the outside to the inside world with more environmentally concrete referents such as nonverbal and audiovisual messages.

Expand administrative and supervisory liaison such that policy matters articulate the emerging sociocultural expectations of all citizens rather than the flow diagrams and PERT charts based on traditional "standards" and institutional status.

Recommendations such as these are scarecely uniquely original; they have been made on a number of occasions. Regardless of how much they may be needed, they will not be implemented until the role of the professional person is based on the "psychology" of the individual patron. Unfortunately, it has been difficult to define the literature of psychology in terms which are operationally acceptable to practicing librarians. Now, however, this overt behavioral approach to self-planned learning offers a unique opportunity for the profession to develop a helping relationship based in the innate learning processes of the individual.

Episodic Professional Response: In the context of a role as counselor consultant, librarians could help the patron to consider the every day situation from which the personal concern or interest emerged. These interests or concerns could be examined for immediate antecedents and possible consequences in order to identify the constraints to be overcome and the opportunities to be realized. In so doing, the librarian would operate on two levels of needed interpersonal encounter: one to solve the immediate need of the patron for congruence between his visceral state and an informed state; and the larger goal to develop a total personality as outlined in the communicative aims of the agency, as well as in the communications profession as a whole.

Activating recall and conception or symbolization is probably the most helpful and the least controlling method that the learning consultant can employ with a patron. The method consists of stimulating a patron to recall perceptions already possessed and which are relevant to the problem under discussion, and to think about those perceptions and what they mean to his value system and congnitive map. The professional consultant can respond employing the following steps which are reciprocal to the behavioral cycle aroused when the stimulus conditions impinge on the client:

Arouse and sustain attention by eliciting a description from the patron of the context of his problems.

Insure recall of previously acquired knowledge by identifying and analyzing constraints and opportunities in his problem context.

Guide learning and conceptual development by relating opportunity cues to audiovisual and verbal materials.

Provide feedback on the patron's developing ideas by negotiating one or more retrieval strategies.

Encourage changes in the patron's behavior through the application of newly acquired information relevant to his problem and its context.

Assess outcomes of changed behavior through some form of measurement and evaluation.

The only way to know, understand and service the patron is through the conversational mode in what is known as the developmental interview. Since talk is the very basis of the interview,

the librarian should deliberately see to it that the patron does most of the talking and most of the deciding of what will be talked about. Genuine listening is hard work and requires that the librarian be alert to all the verbal and nonverbal cues which occur in the cooperative endeavor of making conversational "sense."

Interviewing involves the hearing of the way things are being said, the tones used, the expressions and gestures employed. The following tracking behaviors may help the librarian think about the components in the behavioral cycle as he responds to the patron in a professional manner:

Encourage the patron to articulate his own concern and listen for a considerable period of time without commenting.

Usually wait during silences for the patron to respond; do not interrupt, or overtalk or rush the pace of the interview.

Remain alert to problems or difficulties other than the ones mentioned by the patron; follow abrupt shifts in topic and tie these into a common theme.

Respond with an economy of words; ask clear and relevant questions without resorting to a catalog of "standard" ones.

Use a wide variety of leads to help the patron talk about his situation; phrase questions in an openended manner.

Where pertinent, restate content of patrons statements, and endeavor to reflect feelings of the patron; making summaries or interpretations of patron statements in tentative ways which invite patron feedback.

The dynamics of interviewing is a form of content analysis and consists of a succession of hypotheses as to what is taking place in the cognitive and affective domains of the patron. As nonverbal and verbal changes appear to occur, inferences are made by the librarian in an effort to make his response more pertinent and signficant to the illformed expressions of the patron of his own needs and interests.

As a result of the hypotheses and analyses continuously being made by the librarian the patron is encouraged to translate unorganized experience into symbols which thus becomes accessible to rational analysis and discourse development. At this point the counselor librarian acting as an information negotiator can assist the patron to interrogate the index file prepared by information specialists.

The resource files may have to be addressed with all of the formality required by the indexing and classification schemes, but the "document" drops have to be content analyzed from the client viewpoint:

> Is there evidence in the material combinations that client interest and need to know can be engendered by that representation of the content in the relevant primary message system?
>
> Is there evidence in the material combination that the environmental context of the client or one of similar impact includes the relevant transactional areas?
>
> Is there evidence that contextual opportunities and constraints similar to those of the client are expressed in terms of what others have thought and done which can be realistically modeled by the client?

The use of content analysis for client purposes requires a reorientation of the professional person <u>from</u> a preoccupation with authors and their communications <u>to</u> a primary and almost exclusive concern for the evidence of client concerns and interests, if any, in the resource under consideration for use. Unfortunately, the patron is all too often stopped short in his transactional problem-solving approach because of the librarian's orientation to subject knowledge. On the basis of findings from survey research, the information or materials required are all too often just "dumped on his lap," as it were, rather than being introduced step by step as the patron goes through a real cycle of behavior.

<u>Sequential Professional Response</u>: A learning project may develop around an almost unlimited number of concerns or interests and any combination of them. Despite the vast array of content which has the possibility of being absorbing to anyone, individuals tend to sustain any approach to the environment in patterns of negotiation. Negotiation may occur in episodic response to any situation where the stimuli are strong enough; but it is sustained in those areas which have a more pervasive influence over the individual. Sequential response is facilitated by employing the following three modes:

Select a topic: Articulate an area of interest and its referrant transactional contexts; describe and clarify it through differentiating it from other areas and specifying its relevant subparts such as opportunities and constraints.

Select a topic: Describing and naming an area of interest or concern separates it from other related processes and content. Thus the learner can concentrate energy, exercise choice and screen out other lines of inquiry that would fragment his energy. This may initially be a process of free association which identifies the components that at a later point can be organized into patterns of behavior.

Listing subparts of an area helps to generate a range of more specific alternatives without having to synthesize an entire statement of a problem. This differentiation among areas serves to sharpen the focus. By asking a learner to clarify points of meaning, the consultant asks him to try out his defining and describing skills, working from general levels to more and more varied and specific ones.

What may otherwise remain a static interest can be made dynamic by transforming the subareas into specific tasks, issues and possibly questions. Questions are also curiosity-provokers. Issues create suspense particularly if they are perceived as controversial by the learner. Which side will win, or which system is better? Issues and questions which challenge the imagination are more likely to sustain interest than a rather vague intent to "study something" or to "gain experience." They clearly imply a blueprint for involvement.

Organize a Topic: Group the articulated and analyzed parts into relational patterns and integrate a goal statement; translate the patterns into "engagers" (questions, issues, tasks) such as goal-oriented statements that clearly imply a beginning point, a sense of direction, and an end.

Organize a Topic: The listing of subareas can be a lengthy process, just as the reporting of observations or experiences by a writer in a journal or a book can be an exhausting data-collecting exercise. Organizing lists of data according to common elements or major themes can make many details more manageable. One way of doing this in an operational manner consistent with the transactional negotiations of real life is to group subparts under four headings: (1) the nature of the concern, (2) the effects of environment on the concern, (3) the effects of social attitudes on, and (4) conclusions about what should be done, by the individual and others who may have to be persuaded to become involved.

This conceptual scheme suggests creative endeavors which can represent the most challenging mode of learning. This model implies that some knowledge of "what others have done" and "how new ideas can be related to traditional practices" be integrated as foundations for creativity. Plans can be expanded to include varied but complementary activities, according to the imagination and inclination of learner and consultant, and according to how much previous experience the individual has had.

Evaluate and Complete a Topic: Make decisions and conduct activities to achieve specific goals; compare and contrast (i.e. test) goals with activities to determine level of performances as well as personal and peer group satisfaction.

Evaluate and Complete a Topic: It is important to differentiate between the product of synthesis; and the process of synthesizing or examination. The substance of this mode is the seeing and developing of a new picture. It differs from the clarification of static realities (naming and describing what "is") and from making dynamic connections (explaining "why"). When a learner is synthesizing, he is involved in a process of reorganizing, integrating, concluding and predicting. It is a creative development and the results may be new to him. He looks at his observations or data, analyses relationships, and says "So what?" What is the conclusion? What can I predict?

SIX

INTERVIEW PROCESS

To most respondents, the term "learning project" seemed to be much too formal to describe the continual information gathering and digesting which they enjoyed doing naturally. All respondents apparently have a natural enthusiasm in talking about their efforts to learn. They are pleased when professional people are willing to listen to their developing plans and the problems encountered in undertaking a project which gives them considerable satisfaction. Obviously the anticipated impression made on others cannot be ignored as a strong component in the decision to pursue self-planned learning.

On the basis of the reactions of the interviewers, it would appear that the interviewing process could be for librarians an adjunct at least, if not a major component in the inservice training for client services. It would give them a hands-on experience in how real people actually learn, not how the theoreticians say they do. It would also help them to reconceptualize more concretely the subject categories with which they are constantly involved, and overcome an occupational hazard -- the failure either to identify or to become immersed in the referent base of the subject concepts rooted in their classification and indexing schemes.

After the interviews were complete and all of the data had been collected, the principal investigator held a conference with each of the interviewers. They had been carefully trained in both the process of interviewing and in the purposes and design of the study. Therefore, it was thought that they would have some points of signficance to contribute. The following may serve as examples of this reflection:

> Learners' projects seem very practical. They want to build something, or raise kids, or play some sport. At first

they seem defensive about their planning. They do it in some way or another, but they have a hard time saying what all the steps are.

While all the subjects are independent learners per se, many of my interviewees relied heavily on expert advice with very structured material. My guess would be about 30% were structured as opposed to 55% non-structured with the remaining subjects alternating or taking advantage of both structured and non-structured materials.

Of the interviews I conducted it seemed that people who undertake learning projects are largely self-motivated. They may be introduced to the skill or subject by a friend. But it is doubtful that the friend talked them into getting involved. Most adult learners seemed to have a problem with time; that is they lead busy lives and seem to thrive on periods of relative inactivity when they tend to pile up a new interest.

Most people interviewed seemed to be self planners -- that is they did not rely totally on lectures or a programmed text. Rather they used a variety of sources. While several described the library as being very helpful, no one gave the impression that the library actually led them into new heights of learning -- unless through browsing, certainly not through the helping role. Apparently there is little awareness of the episodic nature of learning projects on the part of librarians, and a cynic might say that it will require a good deal of re-education of existing staff as well as a new approach to teaching adult service in library schools to effectively incorporate the client's approach.

Interviewing was a revelation to me. I think I got a whole new perspective on how people learn by themselves. People have so many sides when you get them talking about what they like to do. The word"learning project" sounded scary to most of them until they began to talk about it in their own way.

In some cases, the learning project is primarily associated with problem solving (i.e. purchased dog; need to train). Very few of the people I talked with saw their interest as pure "escape." Even the escapist could usually relate the project to some life long interest, e.g. "My interest in Sherlock Holmes has improved my knowledge of late 19th century England."

I did not find anyone who had not started out with one goal in mind and later revised, modified the goal -- although certainly many wished that more information were available on certain subjects. Again people are extraordinarily patient with the library, delighted when it does produce something; not surprised at all when it doesn't.

Why can't we interview people who don't use libraries. This kind of interviewing could help us give better service to people. When we really get into people's learning, its not just a list of activities. They really do think about how to get what they want.

The "quick learner" should not be disregarded; he may be fast, but not superficial. I suspect there are many and, in fact, would go so far as to say that those who do use libraries in depth may tend to be methodical plodders. My interviews certainly showed that the library was seen as a place for serious research, but not as an idea center or stimulus for creative planning of learning projects.

Real closeness developed in the interview and they shared something like an adventure. I really see how people need some help, any kind of help that doesn't turn them off. Most people have a thing about the librarian, almost like a love-hate for her sitting back there behind the desk like a sphinx.

Most interviewees had used the library. Their expectations for it were very low. For many, any interested librarian who seemed to care would be the height of service expected. In most cases the library was only one source in a continuum of sources used, and in many cases the library was of no help or very little help for a particular learning project.

The pattern of library use seemed to be that whenever possible, patrons preferred to find their own material whether this is because of a need to be independent or because of the formidable nature of the librarian was not easily ascertained. I suspect a little of both. Many patrons find the card catalog difficult to use -- particularly difficult when 2 systems (Dewey and LC) are employed at once.

From these interviews, the interviewers seemed to develop a new perspective on human learning behavior. Instead of seeing it as teacher-oriented situations, they observed that in a self-planned project the learner does it -- setting objectives, deciding on or choosing resources, finding resources, evaluating progress and dealing with problems that come up. Obviously, no real life learning

project is ever as neat as these few words may seem to imply. Yet in the process, the interviewers did appear to develop a certain tolerance and even patience in listening with a "third ear" to what the respondent really wanted to say.

The interviewers also developed some sophistication in internalizing the interview schedule and thus increasing their flexibility in the interview itself. The combination of pretest interview and comparison of written report with the audiotape record proved to be an effective method of training. What started as a methodological procedure turned out to be a demonstration of the value of a mini-practicum for training purposes. It was only after the interviews were completed that the interviewers recognized this development of their personal competencies.

Librarians may initially be resistent to the counseling interview approach to professional service. But, there are emerging community imperatives to which traditional service cannot respond. The present study is a functional extension of a great deal of survey research; and the process of internalization of the method through a mini-practicum could be a desirable form of inservice training. Once rapport has been established with respondents and the learning project fairly well identified, the librarian interviewer might want to ask some other questions. How has this library been helpful to you? Suppose there was an ideal librarian, how could s/he have helped you?

The most important thing to do is to help people choose the things needed for learning; help them with what to learn and with how. All too often librarians have fallen into the same trap as educators. Instead of facilitating the actual learning itself, educators run courses. They do not help participants <u>with</u> the planning, they do all the planning. Librarians have been the same. They say, "Here are the materials you can use in learning; come and get them!"

Eventually the role of learning consultant may become more widely acceptable among librarians. Broader based consultants will help people sort out and plan their learning projects. Probably they will start with a modified form of the survey questionnaire we have been taking about and develop a helping "conversation" around other points which remain embedded in the instrument. The helping professional will look at patterns, identify the gaps, and facilitate the learning that emerges.

The final interview schedule may appear to be a rather brief and simple instrument. But it was designed this way as a communication device, and after the interviewers had been trained and led through the process which cumulated in this final schedule. Anything more complicated could have hampered the interviewers and certainly would

have confused the respondents. In fact the interviewers were instructed to keep a very simple structure in mind, (though sophisticated in its implications), should the appearance of the interview instrument seem to inhibit the respondent: 1) Why did you get started? 2) What helped you develop the project? 3) How did you know when to stop?

INTERVIEW GUIDE

We are interested in listing the things you have tried to learn during the past year. Perhaps you have tried to get some information or knowledge, or tried to gain new skills and improve old ones, or tried to increase your sensitivity and understanding of people.

Can you think of any efforts like this that you have made during the past 12 months? Can you recall any time that you tried to learn something by reading a book, pamphlet, brochure? When you read newspapers or magazines, do you read certain topics or sections because you want to remember the content?

Have you tried to learn anything from material from a library? From workbooks or programmed instruction? From an encyclopedia or other reference work? Have you learned anything from documentaries or courses on television? From TV news or some other TV programs? From radio? In a theatre?

Have there been any topics or areas that you have tried to learn about from your friends or other people? Have you tried to learn from conversations? Or from asking questions? From a neighbor? From a bartender? From a barber?

Have you learned anything at all from a medical doctor? From a lawyer? From a financial or tax adviser? From a social worker? From a coach? From a private teacher? From a specialist or expert?

WHAT LED YOU TO GET STARTED?

Now I want to find out a bit more about your efforts to learn. Let's begin with one of your recent learning projects? What made you want to take up that topic?

How many hours did you spend at your actual efforts to learn this _____(knowledge or skill)? Of all the time spent learning, how many hours did you spend at planning and preparing for that learning?

HOW DID YOU DO THE LEARNING?

How did you go about learning this_____(subject or skill)? What did you do . . ?

Please include all the steps that you spent in deciding about the learning, planning the learning , and preparing and arranging for it.

This can include such questions as: deciding whether to proceed with the learning --- deciding what to learn --- deciding how to learn --- deciding where to get help --- seeking advice about these decisions (from other people or from printed materials) --- traveling to some learning activities, such as a meeting or practice session or library --- arranging appropriate conditions for learning --- obtaining that book or reaching that person.

Have you used library resources? How have such resources been useful?

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1. On many occasions, learners retain the major responsibility for day-to-day planning and decision-making. How did you decide just what detailed subject matter to learn next, and what activities and resources to use next?

What steps did you take in doing so? Literature search? Card catalog? Follow up?

---

2. On other occasions, much of the detailed direction regarding what to learn or do in each episode comes from some object (a nonhuman resource). How did you use, say recordings, a series of television programs, a set of programmed instruction materials, a workbook or other printed materials, a language lab? Perhaps browsing on library shelves? Indexes and reference books?

Did you follow such a program or materials? Did they tell you what to do next? What else did you do? Follow up?

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3. At times, the planning or deciding on details may come from one other person who helps the learner in a one-to-one situation (a human resource). How did you get advice from other people? What did the librarian do in helping you?

What else did you do? Follow up?

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4. Sometimes learners may attend a group or conference. How did you let the group (or its leader) decide the activities and detailed subject matter from one session to the next?

What else did you do? Follow up?

HOW DID YOU KNOW WHEN TO STOP?

Which of the following answers describes your learning project as this time:

(_____) NOT VERY ACTIVE --- that is, you have dropped it or completed it, or you have set it aside for a while (or are you spending much less time at it now than you were before);

(_____) DEFINITELY ACTIVE -- that is, are you definitely continuing this learning effort right now? Are you spending about as much time as ever at it?

1. Please think for a moment about how much knowledge, information, and understanding you gained as a result of this one learning project -- or think about how much your skills and habits improved -- or how much your attitudes or sensitivity changed. Would you say that altogether:

(_____) you learned a large amount or changed a great deal;

(_____) you were about halfway between (A) and (C); or

(_____) you just changed or learned a little.

---

2. How enthusiastic have you been about having this knowledge and skill?

(_____) very enthusiastic;

(_____) quite enthusiastic or fairly enthusiastic;

(_____) not especially enthusiastic

---

3. Let's set aside your own benefits for a moment, and look at any benefits for other people. Your new knowledge and skill might have been of some benefit to your family, your friends and relatives, your boss, your company or organization, your field, or even to people who live in other places.

To what extent did the knowledge and skill you gained provide some benefit to people other than yourself?

(_____) to a fairly large extent;

(_____) medium (about halfway)

(_____) only to a small extent

SEVEN

METHODOLOGICAL NOTES

The study upon which this report is partly based was designed to investigate the behavior and motives of independent self-learners in the planning and designing of their own individual learning projects. Reader services librarians in the central city and adjacent suburbs were asked to identify individuals who fit the definition of a continuing self-learner, namely an individual who uses library resources to plan and carry out an independent project. Such a project is a sequential learning experience on a topic chosen by the learner who may or may not be directly assisted by a librarian in using library and/or other resources.

The focus of this study was upon the independent self-learner, and on the librarian only to the extent that the self-learner perceived librarian-assistance to be useful. Although the nature of the study precluded any formal sampling procedure, the librarians were asked to make an effort to secure as diverse a group of cases as possible. Each selected independent learner was interviewed in depth about one or more independent learning projects undertaken in the past 9-12 months. The most recently completed project received the major emphasis in the interview. As a definition for the purpose of the study, planned and sustained attention to one topic was taken to include seven hours spread over three days as the minimum for a learning project.

A briefing sheet was prepared in cooperation with the librarians as the basis for initial contact with library clients; and additional orientation was provided on an individual basis. The cooperation of the patron was obtained to serve as a respondent to be interviewed. Respondents were contacted by the interviewers and arrangements made to schedule the interview. The interviews were conducted in a private setting, minimizing interruptions, and where portable recording equipment could be employed. While the length of the interviews varied, the typical interview averaged about one hour in length.

Brief protocol materials were distributed ahead of time to the subjects in order to articulate the idea of continuing education through use of library sources which included both staff and materials. A briefing sheet described in a general manner the way in which the interview was to be conducted and indicated the general nature of the questions that would be asked. This first statement was sent in advance to those who agreed to be interviewed. These items thereby served as devices to avoid or reduce tension, to diminish explanations at the interview itself, and to stimulate the respondents to think about the subject on which they were being interviewed.

An interview instrument was developed and tested in a pilot sample of the continuing self-learners. The instrument was examined for clarity and comprehensiveness by specialists in instrument construction and in continuing education. Instrument development occurred in three phases: a listing of the components within categories as abstracted from the literature of research findings about independent learning projects; the transformation of research findings into data and pattern-gathering items; the interview guide as it appears in section six of this report.

With structural outline in mind, the interviewers were surprisingly flexible in helping the respondent describe the patterns and details of the individual learning project. By coupling these considerations with an understanding of the framework out of which it was developed, the interviewers were able to organize their notes taken in the interview. Since about one-half of the interviews were audiotaped, the investigator had a solid base upon which to compare subsequent reports with actual interviews.

The research advisory committee recommended that more than the two interviewers be employed which had been planned for in the original proposal. Given thorough orientation and training, the reports of several interviewers were considered to be more likely to include all the elements required by the survey. It was considered likely that in this way more information would be obtained suggestive of additional hypotheses not considered at the initiation of the survey.

In order to ensure comparable results, the interviewers were not only trained to administer the instrument but also involved in the process of developing it. In addition to the training sessions, pilot interviews were conducted and recorded verbatim on audiotape and in summary narrative format by the interviewer. The narrative report was compared by the project investigator with the audio record as a check on the summary report. Since each of the interviewers was involved in this stated training experience, the final reports of each survey interview were considered highly reliable as data reporting devices.

The 128 interviews upon which this study is partially based were in most instances conducted in the library service outlet nearest the respondents home. A few were held in the subjects home. Some others were

scheduled in offices of the Graduate School of Library and Information Sciences, University of Pittsburgh, particularly with respondents who used the Bookmobile and some of those from the suburbs around Pittsburgh but well within Allegheny County.

The interview setting was as relaxed as possible. The average interview was about an hour, although the range was from twenty-five minutes to one and a quarter hours. A brief preliminary conversation was held to establish rapport and to answer any questions which may have emerged since the initial telephone call scheduling the interview. The subject was encouraged to talk freely while the interviewer saw to it that the "agenda" or points in the research schedule were dealt with.

Interviewers were encouraged to take brief notes during the interview not only to insure accuracy of report writing but also as a communication device to assure the respondent that the interviewer was carefully following her/his learning project. In as many instances as permitted by respondents, the entire interview was audio recorded to provide the indepth data base required by this study.

A brief informal conversation often took place after each interview drew naturally to a close in order to determine whether there might be something else of interest to be added to the interview. A note was made of those who wished to have a summary version of the report on the project. Finally, after the respondent departed, the interviewer reviewed the notes taken during the interview.

In preparing for an indepth analysis of the patterns of independent learning projects, the principal investigator read the report of each interview. Initially, an effort was made to resist comparisons as attention was focused on the report from each individual respondent. All the cases were then read again with the themes for analysis in mind. In general, the themes corresponded to the questions of the interview schedule. Depending on response, some questions could be combined into a single theme and others were rearranged or discarded as unproductive for that particular interview.

As each case was analyzed, relevant items concerning each theme were recorded from wherever they might appear in the interview. Direct statements from the interviewer's report were used to illustrate the range of elements in each theme. Since the general purpose of this study was to determine whether librarian clients develop independent learning in the same way as other people, it should be noted that all of the themes except one are comparable to the categories employed in other surveys. The final one however dealt with the usefulness of library resources and may be considered as the singular contribution of this study.

Allegheny County Library Service Outlets Nearest to Respondent Residence	
Allegheny Regional Library	Lawrenceville Branch (CLP)
Beechview Branch (CLP)	Monroeville Public Library
Bethel Park Public Library	Mt. Lebanon Public Library
Bookmobile Route (CLP)	Mt. Washington Branch (CLP)
Brookline Branch (CLP)	Northland Public Library
Business (Downtown) Branch (CLP)	Penn Hills Library
Carnegie Free Library McKeesport	Pleasant Hills Library
Carrick Branch (CLP)	Sewickley Public Library
Central Departments & Services (CLP)	Sheridan Branch (CLP)
Clairton Public Library	South Side Branch (CLP)
Community Library of Castle Shannon	Squirrel Hill Branch (CLP)
East Liberty Branch (CLP)	Upper St. Clair Township Library
Hazelwood Branch (CLP)	West End Branch (CLP)
Homewood Branch (CLP)	Woods Run Branch (CLP)
Knoxville Branch (CLP)	Wylie Avenue Branch (CLP)
(CLP: Carnegie Library of Pittsburgh)	

In conclusion, the study was an indepth investigation of how individuals go about planning an independent learning project and using resources to conduct that project to completion. As a precedent in library/information science research, the study has made a start on a line of investigation proposed several years ago (Asheim 1957) but not until now given serious attention by the profession: how does the individual learn? And, how are library resources employed in self-learning patterns?

Suggested Readings

Lester Asheim, "Research in Mass Communication and Adult Reading." Library Trends, 6:120-40, October 1957.

Jean S. Brooks and David L. Reich. The Public Library in Non-Traditional Education. Homewood, Illinois: ETC Publications, 1974.

Thomas Childers. The Information Poor in America Metuchen, N.J.: Scarecrow, 1975.

Lewis A. Dexter. Elite and Specialized Interviewing. Evaston, Illinois: Northwestern Univ.Pr., 1970.

James Dickoff, "Theory in a Practice Discipline." Nursing Research, 17:415-35, 545-54, 1968.

Cyril O. Houle. The Inquiring Mind: A Study of the Adult who Continues to Learn. Madison: Univ. of Wisconsin Pr., 1963.

A. Neelameghan. Presentation of Ideas in Technical Writing New Delhi: Vikas, 1975.

Patrick R. Penland and Aleyamma Mathai. Interpersonal Communication. New York: Marcel Dekker, 1974.

Linda J. Reisser. Facilitation Process for Self-Directed Learning. Ph.D Thesis, University of Massachutts, 1973.

Allen Tough. Adults Learning Projects: A Fresh Approach to Theory and Practice in Adult Learning. Toronto: Ontario Institute for Studies in Education, 1971.